[redacted]

P-W

enn. Gas . Trans. Co. 1 Schreiber-USA
E/4 SW/4 Sec. 35-T39N-R13W 114 11

County Mohave

Area Ariz. Strip

Lease No. Federal

Well Name Tennessee Gas, Transmission Company #1 USA-Schreiber

Location SE SW Sec 35 Twp 39N Range 13W Footage 1900 FWL 580 FSL

Elev 5404 Gr 5416 KB Spud Date 4-25-60 Complete Abandon 5-22-60 Total Depth 4015

Contractor: Well completions, Inc.; Denver, Colo. Approx. Cost $

Drilled by Rotary X
Cable Tool

Casing Size	Depth	Cement
13 3/8	128	160sx

Production Horizon

Initial Production D & A

1st moisture encountered @ 2720'

REMARKS: No cores; No DST's; 0-3083 Drilled w/air

3083-4015 Drilled w/air; water & detergent injected.

Because of bridge in hole, unable to log below 1850'.

Elec. Logs Induction; Gammar Ray.

Applic to Plub X Plugging Record X Completion Report X

Sample Log Am Strat
Sample Descript X
Sample Set T-1184 P-611
Cores

Water well - accepted by

Bond Co. & No. National Surety Corporation 504 9680

Bond Am't $ 10,000 Cancelled 3-7-62 Date Organization Report X

Filing Receipt 9223 dated 3-22260 Well Book X Plat Book X

Loc. Plat X Dedication S/2 SW/4 35-39N-13W

API # 02-015-60003

PERMIT NO. 114 Date Issued 3-22-60

02-015-60003

Formation Tops	Scout	Sample	E. Log	Remarks
Moenkopi			surface	
Kaib ab		390	403	
Toroweap		755	753	
Coconino		1360	1275	
Hermit		1403	1395	
Queantoweap		2250		
Pakoon		2754		
Callville(L.	Supai?)	3470?		
Redwall		3780?		Redwall 3480 ?
Cambrian		3660?		
Cambrian-Tonto		3680?		

Core Analysis, DST charts, etc. _____

DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description*
	0	12	KB to surface
	12	300	Shale and siltstones
	300	420	Dolomite and lime
	420	520	Anhydrite Shale
	520	750	Lime
	750	970	Anhydrite
	970	1210	Lime and dolomite
	1210	1360	Sand, lime and anhydrite
	1360	2190	Sand, siltstones with lime streaks
	2190	2270	Sand and lime
	2270	2880	Sands and dolomite
	2880	4015	Lime, dolomite and sands
			No Cores or DST
			ELECTRIC LOG AND SAMPLE TOPS:
			Moenkopi Surface
			Kaibab 318
			Toroweap 790
			Coconino 1291
			Hermit 1396
			Queantoweap 1758
			Pakoon 2190
			Callville 2650
			Illipah 3155
			Redwall 3480
			Cambrian 3660
			Cambrian-Tonto 3680
			TD 4015

* Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

INSTRUCTIONS:

Attach drillers log or other acceptable log of well.

This Well Completion or Recompletion report and well log shall be filed with the State Land Commissioner not later than thirty days after project completion.

Form No. P-7

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WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

DESIGNATE TYPE OF COMPLETION:

New Well [X] Work-Over [ ] Deepen [ ] Plug Back [ ] Same Reservoir [ ] Different Reservoir [ ] Oil [ ] Gas [ ] Dry [ ]

DESCRIPTION OF WELL AND LEASE

Operator	Address
Tennessee Gas Transmission Company	P. O. Box 1714, Durango, Colorado

Lease Name	Well Number	Field & Reservoir
USA Art J. Schreiber	1	Wildcat

Location: 580' FSL, 1900' FWL SW/4, Section 35, T39N, R13W, G&SR (Sec.—TWP-Range or Block & Survey)

County	Permit number	Date Issued	Previous permit number	Date Issued
Mohave	#114	3/25/60		

Date spudded	Date total depth reached	Date completed, ready to produce	Elevation (~~DF, RKB, RT~~ or Gr.)	Elevation of casing hd. flange
4/25/60	5/20/60		5404 feet	feet

Total depth	P.B.T.D.	Single, dual or triple completion?	If this is a dual or triple completion, furnish separate report for each completion.
4015'	-	Plugged	

Producing interval (s) for this completion	Rotary tools used (interval)	Cable tools used (interval)
-	0-4015'	-

Was this well directionally drilled?	Was directional survey made?	Was copy of directional survey filed?	Date filed
No	-	-	-

Type of electrical or other logs run (check logs filed with the commission): Gamma Ray - Induction — Date filed:

CASING RECORD

Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled
Surface	17 1/2"	13 3/8" OD	48#	128'	160	-

TUBING RECORD

Size	Depth set	Packer set at
in.	ft.	ft.

LINER RECORD

Size	Top	Bottom	Sacks cement	Screen (ft.)
in.	ft.	ft.		

PERFORATION RECORD

Number per ft.	Size & type	Depth Interval

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Am't. & kind of material used	Depth Interval

INITIAL PRODUCTION

Date of first production: — Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:)

Date of test	Hrs. teated	Choke size	Oil prod. during test	Gas prod. during test	Water prod. during test	Oil gravity
			bbls.	MCF	bbls.	° API (Corr)

Tubing pressure	Casing pressure	Cal'ted rate of Production per 24 hrs.	Oil	Gas	Water	Gas—oil ratio
			bbls.	MCF	bbls.	

Disposition of gas (state whether vented, used for fuel or sold):

cc: LOC

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the District Prod. Supt. of the Tennessee Gas Trans (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

R.N. Walker
Signature R.N. Walker

STATE OF ARIZONA STATE LAND COMMISSIONER

Well Completion or Recompletion Report and Well Log
File two copies
Form No. P-7
Authorized by Order No. 4-6-59
Effective April 6, 1959

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PLUGGING RECORD

Operator	Address
Tennessee Gas Transmission Company	P. O. Box 1714, Durango, Colorado

Name of Lease	Well No.	Field & Reservoir
USA Art J. Schreiber	1	Wildcat

Location of Well	Sec-Twp-Rge or Block & Survey	County
580' FSL and 1900' FWL	Section 35, T39N, R13W G&SR	Mohave

Application to drill this well was filed in name of	Has this well ever produced oil or gas	Character of well at completion (initial production): Oil (bbls/day)	Gas (MCF/day)	Dry?
Tennessee Gas Transmission Co.	No			Yes

Date plugged:	Total depth	Amount well producing when plugged: Oil (bbls/day)	Gas (MCF/day)	Water (bbls./day)
5/22/60	4015'			

Name of each formation containing oil or gas. Indicate which formation open to well-bore at time of plugging	Fluid content of each formation	Depth interval of each formation	Size, kind & depth of plugs used Indicate zones squeeze cemented, giving amount cement.
None			

CASING RECORD

Size pipe	Put in well (ft.)	Pulled out (ft.)	Left in well (ft.)	Give depth and method of parting casing (shot, ripped etc)	Packers and shoes
13 3/8" OD	128'	0	128'		

Was well filled with mud-laden fluid, according to regulations?	Indicate deepest formation containing fresh water.
Yes	None

NAMES AND ADDRESSES OF ADJACENT LEASE OPERATORS OR OWNERS OF THE SURFACE

Name	Address	Direction from this well:
Tennessee Gas Transmission Company	P. O. Box 1714	At least one mile in all directions

In addition to other information required on this form, if this well was plugged back for use as a fresh water well, give all pertinent details of plugging operations to base of fresh water sand, perforated interval to fresh water sand, name and address of surface owner, and attach letter from surface owner authorizing completion of this well as a water well and agreeing to assume full liability for any subsequent plugging which might be required.

Acreage drilled is Federal and plugging operations were done in accordance with Federal and State regulations.

Use reverse side for additional detail
File this form in duplicate with the State of Arizona Oil & Gas Conservation Commission

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the District Production Superintendent of the Tennessee Gas Transmission Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

May 27, 1960
Date

Rnwalker R. N. Walker
Signature

5 WJM

STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION
Plugging Record File two copies
Form No. P-15
Authorized by Order No. 4-6-59
Effective April 6, 19 59

114

APPLICATION TO ABANDON AND PLUG

FIELD Wildcat

OPERATOR Tennessee Gas Transmission Co. ADDRESS P. O. Box 1714, Durango, Colorado

LEASE USA Art J. Schreiber WELL NO. 1 COUNTY Mohave

SURVEY G&SR SECTION 35 DRILLING PERMIT NO. 114

LOCATION 580' FSL and 1900' FWL

TYPE OF WELL Dry Hole (Oil, Gas or Dry Hole) TOTAL DEPTH 4015

ALLOWABLE (If Assigned) ______

LAST PRODUCTION TEST OIL ______ (Bbls.) WATER ______ (Bbls.)

GAS ______ (MCF) DATE OF TEST ______

PRODUCING HORIZON None PRODUCING FROM ______ TO ______

1. COMPLETE CASING RECORD.

13 3/8" OD 48# Surface casing set at 128' with 160 sacks of cement.

2. FULL DETAILS OF PROPOSED PLAN OF WORK

We propose to plug the well in the following manner:

Set bridge plug at 125' in bottom of surface casing and spot 15 sacks of cement. Fill casing from 125' to surface with mud-laden fluid. Spot 10 sacks of cement in top of surface casing. Install permanent marker.

If well is to be abandoned, does proposed work conform with requirements of Rule 202? yes. If not, outline proposed procedure above.

DATE COMMENCING OPERATIONS May 21, 1960

NAME OF PERSON DOING WORK J. J. Lacey ADDRESS P. O. Box 1714, Durango, Colo.

CORRESPONDENCE SHOULD BE SENT TO ______

NAME R N Walker R. N. Walker

TITLE District Production Superintendent

Date Approved 5/31/60

W. Mosnuch acty Exp
STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Application to Abandon and Plug
Form No. 15A File 2 Copies
Authorized by Order No. 4-6-59
Effective April 6, 1959

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114 Form 15A

ARIZONA
MOHAVE COUNTY
WILDCAT (W)

114

PETROLEUM INFORMATION
DENVER CASPER
ROCKY MOUNTAIN
OIL INFORMATION

Twp 39n-13w
Section 35
se sw
580 n/s 1900 e/w

OPR: Tennessee Gas & Oil WELL #: 1 USA-Schreiber

ELEV:

*TOPS: Log-~~Sample~~

Tempoweep-surface
Kaibab 327
Toroweep 757
Coconino 1290
Permian 1396

Spl Tops:
Pakoon 2190
Callville 2650
Illipah 3155
Red Wall 3480
Cambrian 3670
Tonto (Cambrian) 3680

DSTS. & CORES:

No cores or tests.

SPUD: 4-25-60 COMPL: 5-22-60
TD: 4015 PB:
CSG: 13-3/8" @ 117 w/100

PERF:

PROD. ZONE:

INIT. PROD:

D & A.

*T·· Electric Logs on Rocky Mountain Wells—Ask Us!

Ariz. 11-061330

TENNESSEE GAS AND OIL COMPANY

USA-ART J. SCHREIBER #1

MOHAVE COUNTY, ARIZONA

REPORT BY

JAMES W. HANCH

CONSULTING GEOLOGIST

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WELL SUMMARY

COMPANY:	Tennessee Gas and Oil Company
WELL:	USA-Art J. Schreiber #1
AREA:	Northwest Arizona (Arizona Strip)
LOCATION:	580' fsl; 1900' fwl, S35-T39N-R13W, Mohave County, Arizona
ELEVATION:	5404' Gr. 5416' KB
CONTRACTOR:	Well Completions, Inc., Denver, Colorado (Air & Rig)
SPUDDED:	April 25, 1960
FINISHED DRILLING:	May 20, 1960
CASING:	13-3/8" @ 128' (KB) W/160 Sx.
CORES:	None
DRILL STEM TESTS:	None
DRILLING PROCEDURE:	0 - 3083 Drilled with Air 3083 - 3015 (4015) Drilled with Air, Water and Detergent injected.
LOGGING SERVICES:	1. Portable Engineering Corp. 1-man Mud-logging Unit 850' - 4015' 2. Schlumberger Gamma Ray Log 128' - 1848' 3. Schlumberger Induction Log 128' - 1850' Note: Because of bridge in hole, unable to log below 1850'.
TOTAL DEPTH:	4015'
PLUGGING PROCEDURE:	Plug #1 - Set bridge plug @ 125'. Topped with 15 sacks regular cement. Plug #2 - 10 sacks plug in top surface pipe W/regulation marker cemented in.
STATUS:	D & A

FORMATION TOPS

	Sample	Schlumberger
Moenkopi (Surface)		
Kaibab	390'	403'
Toroweap	755'	753'
Cocorino	1360	1275 (?)
Hermit	1403'	1395
Queantoweap	2250'	No Log
Pakoon	2754'	No Log
Callville (L. Supai ?)	3470' (?)	No Log
Redwall	3780' (?)	No Log

CHRONOLOGICAL LOG

April 25, Spudded at 12:00 Noon
Drilled 0-73' (9-7/8" hole)

April 26, Drilled 73-134'(9-7/8" hole)
Reamed 0-122'(Reamed to 17-1/2")

April 27, Reamed 122-134
Ran 3 Jts. 116.65' of 13-3/8", H-40, 48.00#, 8 RT casing, landed @ KB. Cemented by Howco W/160 Sx. regular cement, 2% Calcium Chloride; Circulated cement, plug down @ 2:30 P.M.

April 28, Nippled up - drilled plug @ 1:30 P. M.
Found top of plug @ 125'
Drilled 134-309' (7-7/8" hole)

April 29, Drilled 309-465'

April 30, Drilled 465-560'

May 1, Drilled 560-608'

May 2, Drilled 608-683'

May 3, Drilled 683-863'

May 4, Drilled 863-1076'

May 5, Drilled 1076-1173'

May 6, Drilled 1173-1312'

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May 7, Drilled 1312-1465' - Ran Mission Hammer Drill 1397-1481'

May 8, Drilled 1465-1690'

May 9, Drilled 1690-1990'

May 10, Drilled 1990-2222' - Installed after Cooler on Compressors.

May 11, Drilled 2222-2446' - Ran Hammer Drill @ 2316' - Hooked up Booster.

May 12, Drilled 2446-2817' - Encountered Moisture 2720-30'

May 13, Drilled 2817-2978'

May 14, Drilled 2978-3083' - Stopped dusting @ 3065' - Required 12 hours to get out of hole. Worked pipe most of way - mud on pipe - layed down Hammer Drill.

May 15, Drilled 3083-3223' - Drilling without Hammer Drill 3083-3094 (11' in 4-1/2 hours), Below 3094 (With Hammer Drill), Drilled 4" to 5"/ft. Started injecting detergent charged water @ 3083'.

May 16, Drilled 3223-3400'

May 17, Drilled 3400-3561' - Started running 7-7/8" 3-Point bottom hole reamer.

May 18, Drilled 3561-3680'

May 19, Drilled 3680-3885'

May 20, Drilled 3885-4015' - Blew hole, pulled pipe, layed down Drill Collars. Stripped-off B O P's., Waiting on Schlumberger.

May 21, Started running logs @ 4:00 A. M. - Would not go down - back in hole and cleaned out to bottom. Had difficulty getting out of hole. Started in hole W/Gamma Ray-Neutron Sonde, found Neutron not functioning - pulled out to repair, could not repair - started back in hole to run Gamma Ray Curves. Hole bridged @ 1850'. In hole W/Bit and tried to dry drill out bridge - could not - logged 1850' to bottom surface pipe.

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May 22, Finished logging 2:30 A. M. Layed down Drill Pipe; Set 13-3/8" bridge plug @ 125', topped with 15 Sacks regular cement. 10 Sacks plug in top surface pipe W/regulation marker cemented in.

Finished plugging @ 10:30 A. M.

Released Rig.

#114

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SAMPLE DESCRIPTION

130 - 150	Shale, medium gray to greenish-gray, mostly fissile, some blocky, slightly calcareous.
150 - 160	Shale, gray to brownish-gray, mostly fissile, some blocky, slightly micaceous and calcareous shale.
160 - 170	Limestone, medium gray, very finely crystalline, hard, with abundant shale as above.
170 - 180	Shale, medium gray, fissile, slightly pyritic, hard.
180 - 190	Shale, as above, with abundant gray to tan argillaceous limestone.
190 - 370	Shale, maroon to light brown, silty, trace gypsum, trace greenish-gray shale, slightly calcareous.
370 - 385	Chert, gray to milky.
385 - 390	Shale, light green, fissile but hard, locally slightly pyritic.
390 - 400	Limestone, buff to cream, hard and dense, locally glauconitic, abundant milky to smoky chert - trace of green shale as above.
400 - 420	Limestone, buff to tan, hard, sub-lithographic, with abundant chert.
420 - 430	Shale, maroon, locally quite silty, with abundant anhydrite.
430 - 440	Limestone, buff to tan, hard, abundant chert.
440 - 450	Shale, maroon, locally silty, abundant anhydrite.
450 - 460	Dolomite, medium gray, hard, dense, with abundant chert.
460 - 480	Limestone, buff to gray, some dolomitic, locally pyritic, abundant chert.
480 - 500	Limestone, as above, with abundant chert, trace of gray calcareous shale.
500 - 520	Limestone, buff to light gray, finely granular, argillaceous, abundant chert and anhydrite, trace of maroon shale.

520 - 620	Limestone, cream colored, sub-lithographic to lithogrsphic, very hard, trace chert.
620 - 680	Limestone, cream to white, mostly sub-lithographic, some micro-granular, hard, dense.
680 - 750	Limestone, buff to cream to white, mostly sub-lithographic, some micro-granular, dense, hard, trace chert.
750 - 760	Limestone, as above, with trace medium gray shale.
760 - 790	Dolomite, gray to brown, hard, dense, some questionable dead oil stain, no fluorescence, no cut, abundant anhydrite.
770 - 780	Anhydrite, clear, crystalline, with considerable dolomite as above.
780 - 800	Dolomite, gray to brownish-gray, dense, hard, with abundant blue-gray chert - trace anhydrite.
800 - 810	Anhydrite, white to clear, crystalline.
810 - 820	Dolomite, brown to brownish-gray, mostly dense, some micro-crystalline, hard.
820 - 840	Dolomite and Anhydrite, both as above, in about equal amounts.
840 - 850	Dolomite, brown to brownish-gray, hard, dense, with minor amount of black, carbonaceous, sparsely micaceous and slightly calcareous, fissile shale.
850 - 860	Anhydrite, cream to white, dense, with minor amount of medium gray, slightly argillaceous dolomite.
860 - 870	Anhydrite, light brown to amber, dense, finely crystalline.
870 - 880	Anhydrite, light brown to white, mostly dense, minor amount of gray to bluish-gray dolomite. Trace of light gray, very, very fine grained, hard and tight sandstone.
880 - 890	Sandstone, light gray, very, very fine grained, tight, with abundant light brown siltstone, also abundant anhydrite.

890 - 900	Anhydrite, white to clear, dense to crystalline, trace of gray dolomite.
900 - 910	Anhydrite, as above, with abundant light gray siltstone, grading to very fine grained sandstone.
910 - 920	Anhydrite, white to clear, dense, with abundant maroon, silty shale.
920 - 940	Anhydrite, amber to clear, dense, with minor amount of medium gray to greenish-gray, blocky shale.
940 - 950	Anhydrite, as above, with considerable dark gray, hard, dolomite, trace of black, carbonaceous shale. Note: This sample gave hydrocarbon odor from sack - no gas show by mud-logging unit, no fluorescence or cut. Some appears to show a slight dead oil stain.
950 - 960	Shale, medium gray to greenish-gray, blocky, not too hard, slightly calcareous, abundant anhydrite.
960 - 970	Anhydrite, white to clear, dense to finely crystalline, with abundant shale as above.
970 - 980	Dolomite, brown to tan, dense, hard.
980 - 990	Dolomite, tan, dense, hard with abundant greenish-gray shale.
990 - 1000	Dolomite, tan to buff, dense, hard, trace greenish-gray shale as above.
1000 - 1030	Dolomite, buff to tan, dense, hard.
1030 - 1040	Limestone, buff to light brown, micro- to finely crystalline, hard, trace of green shale.
1040 - 1050	Limestone, tan, finely to coarsely crystalline, appears to be somewhat nodular.
1050 - 1060	Limestone, as above, with an occasional fragment showing slight micro-vuggy porosity, some pinkish, cherty limestone - trace milky chert.
1060 - 1070	Limestone, tan to light brown, finely to coarsely crystalline, hard, with abundant tan to yellow marlstone with an occasional fragment showing pink to red tinge, earthy, trace chert. Note: This could be weathered surface material.

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1070 - 1080	Limestone, tan to light brown, some with pink tinge, finely to coarsely crystalline, trace marlstone, as above. Trace dark gray to brown, fissile shale, locally very glauconitic.
1080 - 1100	Limestone, tan to buff, some with very slight pink tinge, dense to micro-crystalline, very hard, trace milky chert.
1100 - 1180	Limestone, tan to cream, dense to micro-crystalline, hard, trace chert.
1180 - 1190	Limestone, tan, dense to micro-crystalline, hard, trace chert.
1190 - 1210	Limestone, as above, with considerable chert, few chert inclusions, locally slightly sandy.
1210 - 1220	Sandstone, tan to light brown, some with pinkish tint, very fine grained, very calcareous, very tight, with abundant medium gray, very fine grained, slightly calcareous, argillaceous sandstone, grading to sandy shale. Tan sandstone appears to be weathered.
1220 - 1230	Anhydrite, light brown to white, dense to finely crystalline.
1230 - 1250	Dolomite, cream to light gray, dense to micro-granular, abundant milky chert.
1250 - 1260	Dolomite, cream to buff, dense to micro-crystalline, locally slightly sandy, abundant gray to blue-gray chert.
1260 - 1270	Dolomite, cream to light gray, somewhat granular, with many interspersed granules of anhydrite, abundant milky to blue chert.
1270 - 1280	Dolomite, as above, predominant with abundant medium gray to greenish-gray, very fine grained, dolomitic sandstone, trace of anhydrite, trace of chert.
1280 - 1290	Sandstone, medium gray to light gray, very fine grained, grading to siltstone, very calcareous, hard and tight, no visible porosity or permeability.
1290 - 1300	Sandstone, as above, with abundant gray to tan dolomite, considerable anhydrite.

1300 - 1310	Limestone, light brown, dense, hard, some dolomitic, with abundant brown, very calcareous shale.
1310 - 1320	Sandstone, medium gray, fine grained, ill-sorted, slightly dolomitic, very hard and tight.
1320 - 1350	Anhydrite, tan to white, dense to finely crystalline, with abundant brown to maroon siltstone grading to very fine grained sandstone.
1350 - 1360	Anhydrite, as above, with minor amount of light brown, hard, dense, slightly sandy dolomite.
1360 - 1390	Sandstone, light gray, fine grained, nearly 100% quartz - all drills up, no clusters.
1390 - 1405	Sandstone, light gray to light tan, fine to very fine grained. Nearly all quartz grains with calcareous cement. Hard, no visible porosity or permeability.
1405 - 1430	Siltstone, maroon to light brown, hard, trace of gray, fissile shale.
1430 - 1440	Siltstone, as above, with abundant buff to white, fine to very fine grained, hard, tight, slightly calcareous sandstone.
1440 - 1450	Sandstone, buff to nearly white, very fine grained, nearly all drills up into individual quartz grains.
1450 - 1460	Sandstone, medium gray to light gray, fine to very fine grained, hard, tight, calcareous.
1460 - 1470	Siltstone, maroon to light brown, hard, micaceous.
1470 - 1480	Siltstone, as above, with abundant buff to light gray, very fine grained, hard, tight, slightly calcareous sandstone.
1480 - 1490	Sandstone, some medium gray, some cream to white, fine to very fine grained, hard, tight, slightly calcareous, locally pyritic.
1480 - 1550	Siltstone, maroon to brown, hard, slightly micaceous.
1550 - 1570	Sandstone, light gray to nearly white, very fine grained, hard, tight, calcareous cement.

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1570 - 1580	Sandstone, as above, predominant, with some medium gray, fine grained, argillaceous, micaceous and pyritic sandstone.
1580 - 1590	Sandstone, medium gray, fine grained, micaceous, pyritic, hard, tight, with abundant nearly white sandstone.
1590 - 1610	Sandstone, nearly white, very fine grained.
1610 - 1710	Siltstone, maroon, hard, micaceous.
1710 - 1720	Shale, maroon, silty, blocky.
1720 - 1730	Siltstone and Sandstone, siltstone is maroon, hard; sandstone is buff to nearly white, very fine grained, slightly calcareous, hard and tight.
1730 - 1770	Siltstone, maroon, slightly micaceous, hard.
1770 - 1810	Sandstone, buff to nearly white, very fine grained, slightly calcareous, hard, tight. Trace chert, trace pyrite.
1810 - 1840	Siltstone, maroon, slightly micaceous, hard.
1840 - 1850	Pyrite, finely to coarsely crystalline, with some light tan to white, very fine grained, calcareous sandstone.
1850 - 1860	Sandstone, light tan to white, very fine grained, slightly calcareous, with abundant maroon, very fine grained, silty sandstone grading to siltstone, abundant pyrite.
1860 - 1880	Sandstone, light tan to white, very fine grained, slightly calcareous, no visible porosity, abundant pyrite.
1880 - 1890	Sandstone, as above, with few selenite crystals.
1890 - 1900	Sandstone, light tan to white, very fine grained, calcareous cement, tight, trace selenite, trace pyrite.
1900 - 1940	Sandstone, light tan to white, very fine grained, slightly calcareous cement, no visible porosity or permeability, trace pyrite.

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1940 - 1960	Sandstone, as above, predominant,minor amount of light brown to maroon siltstone, numerous free selenite crystals.
1960 - 1980	Sandstone, light gray to tan, very fine grained, slightly calcareous, no visible porosity or permeability, trace chert.
1980 - 2000	Sandstone, mostly light tan, some light gray, very fine grained, tight, slightly calcareous, minor amount of maroon siltstone.
2000 - 2010	Siltstone, maroon to light brown, slightly micaceous, minor amount sandstone as above.
2010 - 2020	Sandstone, light tan to nearly white, very fine grained, hard, tight, slightly calcareous, minor amount siltstone as above, trace pyrite.
2020 - 2030	Siltstone, maroon to light brown, slightly micaceous and calcareous, grading to very fine grained sandstone.
2030 -2040	Siltstone and sandstone, both as above, in about equal amounts.
2040 - 2060	Siltstone, maroon to pinkish-brown, slightly micaceous and calcareous.
2060 - 2070	Siltstone, as above, with minor amount of greenish-gray, slightly micaceous siltstone, both slightly calcareous.
2070 - 2090	Siltstone, maroon to light brown, slightly calcareous, slightly micaceous.
2090 - 2100	Siltstone, as above, with abundant light tan to nearly white, very fine grained, tight sandstone.
2100 - 2130	Sandstone and siltstone, both as above, in about equal amounts.
2130 - 2140	Sandstone, light tan to nearly white, very fine grained, calcareous cement, very tight, abundant pyrite, some selenite.
2140 - 2150	Sandstone, as above, with a few fragments showing a "malachite green" stain on face of sandstone clusters, trace of maroon siltstone.

[redacted]

2150 - 2160	Sandstone and siltstone, sandstone is light tan to nearly white, very fine grained, tight, slightly calcareous; siltstone is maroon, slightly micaceous and calcareous, minor amount of cream to white, finely crystalline limestone.
2160 - 2170	Siltstone, as above, with abundant greenish-gray, slightly argillaceous dolomite with a few sand grains imbedded in matrix.
2170 - 2190	Sandstone, white, very fine grained, slightly calcareous, trace pyrite.
2190 - 2200	Limestone, light tan to white, finely crystalline with abundant white, fine sandstone and maroon siltstone (limestone 60%).
2200 - 2230	Sandstone, white, very fine grained, slightly calcareous cement.
2230 - 2240	Limestone, light tan, finely crystalline, abundant white, very fine grained, calcareous sandstone and maroon siltstone. Trace medium gray, hard, micaceous, slightly calcareous shale.
2240 - 2250	Dolomite, light greenish-gray, dense, with a few imbedded sand grains, abundant maroon siltstone.
2250 - 2260	Sandstone, light tan to nearly white, very fine grained, slightly calcareous, with abundant white limestone and maroon shale.
2260 - 2270	Sandstone, white, very fine grained, slightly calcareous, trace maroon shale.
2270 - 2660	Sandstone, white, very fine grained, slightly calcareous, nearly all drills up into individual sand grains, very few clusters.
2660 - 2680	Sandstone, as above, predominant, with abundant light green dolomitic siltstone to very fine grained sandstone.
2680 - 2690	Shale, greenish-gray, blocky to fissile, slightly micaceous and pyritic, slightly calcareous, abundant sandstone as above.
2690 - 2700	Tan to cream, very fine grained, calcareous, tight, some slight dead oil stain noted on a few fragments, no fluorescence, no cut.

2700 - 2710	Sandstone, as above, with a minor amount of medium gray, hard, calcareous and micaceous siltstone.
2710 - 2730	Sandstone, light tan to pink, fine grained, hard, tight, with abundant maroon, fissile to blocky shale.
2730 - 2740	Sandstone, pink, fine grained (but much coarser grained than any sand above), very slightly calcareous. Some of sand shows slight porosity and permeability. Some slight black to brown dead oil stain on a few fragments, no fluorescence or cut. At 2720-2730 some moisture showed in samples - damp sand - dusting resumed after blowing hole about ten minutes.
2740 - 2750	Shale, maroon to brown, blocky to fissile, slightly micaceous, abundant tan to pink, fine grained, sandstone.
2750 - 2760	Sandstone, tan to cream predominant, some pink, very fine grained, slightly calcareous, tight sandstone, with abundant maroon to brown shale.
2760 - 2770	Dolomite, cream colored to pinkish, dense to finely crystalline, with abundant brown shale.
2770 - 2790	Dolomite, light gray to cream to pinkish, finely crystalline to dense, hard, with abundant tan to gray, very fine grained sandstone, showing slight dead oil stain locally.
2790- 2830	Sandstone, light gray to white, very fine grained, slight calcareous cement, tight and hard.
2830 - 2840	Sandstone, light gray to white, fine grained with an occasional large quartz grain inclusion, very calcareous, tight. Considerable light tan to pink dolomite.
2840 - 2850	Dolomite, cream to pink, finely crystalline, locally sandy, with abundant nearly white, fine grained, tight sandstone.
2850 - 2860	Dolomite, light tan predominant, some pink, dense to finely crystalline, hard.
2860 - 2880	Dolomite, as above, with trace greenish-gray, micaceous shale.
2880 - 2890	Dolomite, tan, dense to finely crystalline, hard.
2890 - 2950	Dolomite, light tan, dense to micro-crystalline, locally sparsely pyritic, hard.

2950 - 2960	Dolomite, as above, with abundant medium gray to greenish-gray, micaceous and slightly pyritic, argillaceous siltstone.
2960 - 3010	Dolomite, light tan, dense to micro-crystalline, hard, with trace siltstone as above.
3010 - 3090	Dolomite, tan to light brown, dense to micro-crystalline, hard, with minor amount of light brown, slightly fossiliferous limestone at 3020 - 3040.
3090 - 3130	Dolomite, cream to white, dense, very hard.
3130 - 3140	Skip
3140 - 3150	Dolomite, light tan to white, finely to coarsely crystalline, some showing fair to good vuggy porosity, some of porosity filled with secondary white-clay like mineral, non-calcareous. Trace of chert - a few vugs show a trace of heavy, dead oil stain.
3150 - 3160	Dolomite, light tan to white, finely to coarsely crystalline, most showing fair to good vuggy porosity, some granular dolomite showing fair to good intergranular porosity and some poor to fair dead oil stain, slight fluorescence and cut. Tract chert.
3160 - 3170	Limestone, tan to light brown, dense, to finely crystalline, with abundant maroon to purple, micaceous, calcareous, hard siltstone, grading to silty limestone.
3170 - 3190	Limestone, tan to light brown, hard and dense, also light brown to purple, hard, siliceous limestone in about equal amounts.
3190 - 3200	Limestone, as above, with abundant (30%) light brown, silty, earthy shale.
3200 - 3210	Limestone, tan to pink to white, dense to micro-crystalline, hard, trace purple, siliceous limestone.
3210 - 3220	Limestone, light tan to pink, dense to micro-crystalline, hard.
3220 - 3230	Limestone, as above, predominant with minor amount (10%) of pink, fine grained, very calcareous sandstone - trace of red to light brown shale.

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3230 - 3240	Limestone and Shale, limestone as above, shale is light brown to red, silty, very calcareous, considerable pink sandstone as above.
3240 - 3260	Limestone and Shale, limestone is tan to cream, dense to micro-crystalline, hard; shale is purple, blocky to fissile, very micaceous, calcareous, hard. Considerable pink, fine grained, very calcareous sandstone, showing slight porosity.
3260 - 3270	Limestone, tan to cream, dense to finely crystalline, hard, with abundant light brown to purple, hard, very calcareous siltstone.
3270 - 3280	Skip
3280 - 3290	Limestone, tan to gray, some pink, dense to finely crystalline, hard.
3290 - 3310	Limestone, tan to light gray, some pinkish, dense to finely crystalline, hard, some recrystallization, some showing fossil fragments.
3310 - 3330	Limestone, tan to light gray, dense to finely crystalline, some gray to pink siliceous limestone, all hard - few fossil fragments.
3330 - 3340	Limestone, tan to gray, dense, finely crystalline, hard, trace of pink, siliceous limestone.
3340 - 3360	Sandstone, pink, fine grained, very calcareous cement, very hard, no visible porosity or permeability - trace limestone as above.
3360 - 3370	Sandstone, as above, with abundant maroon to light brown, locally silty shale - trace gray, hard, limestone.
3370 - 3380	White to pink, fine grained, very calcareous, hard and tight, with minor amount (15%) of gray to cream, finely crystalline, hard limestone.
3380 - 3390	Sandstone and Limestone, both as above, in about equal amounts with an abundance of maroon to light brown shale.
3390 - 3400	Limestone, gray to tan, dense to finely crystalline, hard, with an abundance of sandstone and shale as above.
3400 - 3410	Limestone, gray to tan, dense to finely crystalline, hard.

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3410 - 3420	Limestone, as above, with abundant pink, very gritty, locally fossiliferous limestone, grading to very calcareous sandstone.
3420 - 3450	Sandstone, pink to white, fine grained, ill-sorted, calcareous to very calcareous, with abundant maroon to brown shale.
3450 - 3460	Skip
3460 - 3470	Sandstone & Shale, sandstone is white to pink, fine grained, calcareous, hard and tight; shale is maroon to light brown, slightly micaceous, slightly calcareous, blocky, trace chert.
3470 - 3520	Limestone, gray to tan to pink, dense to finely crystalline, locally gritty, abundant pink to rose chert.
3520 - 3530	Limestone, gray, dense to finely crystalline, hard, with abundant milky to rose chert, also abundant gray and maroon shale.
3530 - 3570	Limestone, as above, with abundant milky to rose chert, also abundant maroon to light brown, locally silty shale. (red shale could be cavings)
3570 - 3580	Limestone, gray, dense to finely crystalline, showing indication of fracturing - some black, dead oil stain on fracture faces - no fluorescence or cut, some milky chert.
3580 - 3600	Limestone, as above, predominant, some white, granular dolomite showing slight dead oil stain, no fluorescence or cut - considerable milky chert.
3600 - 3610	Limestone, light gray to tan, dense to finely crystalline, hard, with abundant light tan to white, dense to finely granular dolomite, showing dead oil stain locally.
3610 - 3620	Limestone, tan to gray, dense, hard, with abundant white to milky chert.
3620 - 3650	Limestone, as above, predominant, some showing slight dead oil stain, some white, crystalline limestone, abundant white to milky chert.
3650 - 3660	Limestone, gray to tan, dense to finely crystalline, abundant milky chert.

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3660 - 3670	Limestone, as above, with some yellow, calcareous siltstone and maroon siltstone - abundant chert.
3670 - 3700	Limestone, as above, with abundant yellow calcareous and micaceous siltstone (appears to be weathered), also abundant milky chert.
3700 - 3710	Limestone, mostly gray, some tan, finely crystalline, hard, some showing slight dead oil stain, particularly along fracture faces, abundant yellow, calcareous siltstone. Few fossil fragments noted in limestone.
3710 - 3730	Limestone, gray to tan, some slightly pinkish, dense to finely crystalline - few fossil fragments in some of limestone - abundant chert.
3730 - 3740	Limestone, mostly cream, some tan and gray, dense to finely crystalline, with abundant chert.
3740 - 3760	Limestone, as above, with abundant red and yellow siltstone that may be cavings.
3760 - 3780	Limestone, tan to light gray, dense to finely crystalline, abundant milky chert.
3780 - 3800	Limestone, gray, fairly dark, dense to crystalline, some showing fossil fragments, hackly fracture, some pink granular limestone, abundant milky chert. Sample has much maroon shale - may be cavings.
3800 - 3840	Limestone, some gray to tan and dense, some pink and granular - abundant chert.
3840 - 3850	Limestone, medium gray, mostly dense, sub-lithographic, hard, locally stylolitic, with abundant chert.
3850 - 3880	Limestone, medium gray to medium dark gray, sub-lithographic, hard, hackly, considerable tan to milky chert.
3880 - 3890	Limestone, medium gray to medium dark gray, dense to micro-crystalline, hackly, hard, locally sparsely pyritic, trace tan to milky chert.
3890 - 3940	Limestone, tan to gray, dense to micro-crystalline, hard, abundant chert.
3940 - 3950	Limestone, tan to medium gray, dense, hard, often hackly, abundant tan to milky chert.

3950 - 3970	Limestone, mostly tan, some light gray, dense, hard, considerable chert.
3970 - 3980	Limestone, cream to white, dense to micro-crystalline, hard, some recrystallization.
3980 - 3990	Limestone, tan to gray, dense to micro-crystalline, hard, hackly.
3990 - 4015	Limestone, tan to gray, dense to micro-crystalline, some with micro-vugs, probably low permeability, hard, hackly.

BIT RECORD

Run #	Make	Size	Type	In	Out	Footage	Hours	Wt. on Bit	Remarks
1	CP	9-7/8	EM	0	46	46	-	-	Surface Hole
2	CP	"	EM	46	134	88	-	-	" "
3	Reed	17-1/2		0	134	134	-	-	Reaming
4	HTC	7-7/8	OWC	134	362	228	11-1/2	8	
5	HTC	"	W7R	362	386	24	7-1/2	8	
6	CP	"	EH3	386	482	96	9-1/2	8	
7	CP	"	EH3	482	523	41	11-1/2	7	
8	CP	"	EH3	523	579	56	9-1/2	8	
9	CP	"	EH3	579	590	11	7	8	
10	CP	"	EH4	590	643	53	25	12	
11	CP	"	EH4	643	789	146	19-1/4	15	
12	CP	"	EH3	789	1015	226	22-1/2	15	
13	CP	"	EH2	1015	1101	86	11-1/4	15	
14	CP	"	EH3	1101	1173	72	14-1/4	15	
15	CP	"	EH4	1173	1303	130	17	10	
16	CP	"	EH4	1303	1397	94	15-1/2	10	
17	CP	"	EH4	1397	1481	87	6	10	Hammer Drill -
18	CP	"	EH3	1481	1690	209	17	10	
19	CP	"	EH3	1690	1990	300	19	10	
20	CP	"	EH3	1990	2275	285	25-1/2	10	
21	CP	"	EH3	2275	2316	41	2-1/2	8	
22	Reed	"	YHW	2316	2693	377	17-1/2	10	Hammer Drill
23	HTC	"	W7RJ	2693	2890	177	14	12	" "
24	HTC	"	W7RJ	2890	2978	88	8-1/2	8	" "
25	Reed	"	YHW	2978	3083	105	8-1/2	8	" "
26	CP	"	EH3	3083	3094	11	4-1/2	10	Re-run Bit No Hammer
27	HTC	"	W7RJ	3094	3290	196	15	10	Hammer Drill (Drill
28	Reed	"	YVW	3290	3428	138	17-1/4	12	" "
29	HTC	"	W7RJ	3428	3561	133	10	12	" "
30	CP	"	EH3	3561	3663	102	10-1/2	12	" "
31	CP	"	EH3	3663	3741	78	8-1/2	10	" "
32	CP	"	EH3	3741	3951	210	15-1/2	10	" "
33	Reed	"	YHW	3951	4015	64	3-1/2	8	" "

SLOPE TESTS (EASTMAN)

DEPTH	DEVIATION	DEPTH	DEVIATION
190	3/4	1893	1-3/4
290	3/4	1940	1-1/2
385	3/4	2020	2
480	1-3/4	2125	2-1/4
520	2	2180	2-3/4
548	1-3/4	2210	2-3/4
590	1-3/4	2240	2-3/4
621	1-1/2	2316	2
640	1-1/2	2380	2-1/4
670	1-1/2	2435	2-3/4
700	1-1/4	2500	2-1/2
746	3/4	2560	2-3/4
765	1	2632	2-1/4
855	1	2719	2-1/4
963	1/4	2835	3
1070	1-3/4	2870	3
1117	1-3/4	2938	3
1135	2	2995	3-3/4
1165	2-1/2	3065	2-1/2
1195	2	3157	1-3/4
1272	1-3/4	3240	1-1/2
1290	2-1/2	3340	1-3/4
1324	2-1/4	3446	1-3/4
1397	2	3550	4
1417	1-3/4	3580	3-3/4
1450	1-3/4	3641	4-1/4
1552	1-1/2	3682	4-3/4
1600	1-3/4	3713	4-3/4
1690	2	3997	6
1800	1-3/4		

Tenn. Gas Trans Co. #1 USA-Schreiber. 35-39N-13W Permit #114

OPERATIONAL SUMMARY

The #1 Schreiber Well was spudded on April 25, 1960. Well Completions, Inc., of Denver, Colorado, was Contractor. This company provided the rig as well as the compressors for the drilling of this well.

A No. 510 Joy, truck mounted rig, equipped to use either air or mud was employed. At the beginning of the hole, 2 Joy, 13-1/2 x 7 x 7, Model WN 102, 800 cubic feet per minute compressors were used. A Joy, Model WMB 112, 4 x 4 x 7 Booster was placed on the line on May 11, at a depth of 2316', in order to provide adequate air pressure to insure proper operation of the Mission Hammer Drill.

The first moisture encountered in the hole was at a depth of 2720-2730'. This was not serious, however, and after blowing hole for about an hour, dust drilling was resumed. Between 2730' and 3080', however, additional moisture was encountered, gradually decreasing the amount of dust return. Finally, at a depth of about 3070' dusting ceased. Upon pulling pipe at a depth of 3080', it was found that water had "balled-up" considerable mud on the pipe. In fact some difficulty was experienced in getting the pipe out of the hole. The amount of water encountered actually was negligible, but it was sufficient to be bothersome to straight air drilling. At this point it was decided to inject water and detergent. This cleaned the hole successfully and this process was continued for the remainder of the hole. Two to five barrels per hour of detergent charged water were injected into the air stream, and this proved to be adequate to keep the hole clean.

Some extremely hard drilling was encountered in the upper portion of the hole. The Kaibab Limestone was found to be very hard, with drilling time reaching as high as 70 minutes per foot. Due to this slow rate of penetration it was decided to try using the Mission Hammer Drill, a rotary pracussion tool actuated by compressed air. This tool was first run at a depth of 1397', but sufficient air pressure could not be maintained to operate the tool properly. It is believed, however, that even with sub-standard pressures, the tool increased the rate of penetration to some degree. The tool was not used further, however, until a booster could be placed on the line. By this time the hole was at a depth of 2316'. At this depth the booster was placed in operation and the Hammer Drill was again employed. Drilling rates were immediately increased by two to three times as compared to conventional air drilling. The first two or three trips in the hole the Hammer Drill experienced failures of the lock ring used to secure the choke in the tool. Mr. John Loggie, Mission Engineer, improvised, however, and this difficulty was overcome. The tool worked for the remainder of the hole completely trouble-free.

An outstanding example of the efficiency of the Hammer Drill was demonstrated at a depth of about 3100'. Upon encountering sufficient moisture in the hole to change to "mist drilling", it was deemed advisable to remove this tool from the string for one trip, or until the hole could be adequately cleaned up. The tool was removed from the string at a depth of 3083'. The next 11' required 4-1/2 hours to drill. At a depth of 3094' a trip was made and the Hammer Drill was returned to the string. In the same formation the drilling time was from 12' to 15' per hour after the tool was placed back in operation.

Special "beefed-up" bits are necessary to use with this tool in order to withstand the added pressures provided by the precussion action on the bit.

The Mission Hammer Drill demonstrated an amazing ability to drill extremely hard formations at a good drilling rate. It is believed that had this tool been used from a depth of about 350' it would, in all probability, have saved several days drilling time, as well as several bits.

Although the air drilling proved to be completely successful at this location, it is true that moisture had been on some of the shale beds as long as they would stand it. These shales were "heaving" to such an extent that it was impossible to run logs below 1850'. Had the hole been continued below its present total depth, in all probability it would have been necessary to ream the hole and run a protective casing string.

After reviewing this operation, it is the writer's opinion that the employment of air and the Hammer Drill saved many thousands of dollars in the drilling of this well.

Submitted by,

James W. Nance
Consulting Geologist

April 1960
Denver, Colorado

114

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATION TO DRILL X DEEPEN ☐ PLUG BACK ☐

NAME OF COMPANY OR OPERATOR | DATE

Tennessee Gas Transmission Company | April 20, 1960

Address: P. O. Box 1714 | City: Durango | State: Colorado

DESCRIPTION OF WELL AND LEASE

Name of lease: USA Art J. Schreiber

Well number: 1

Elevation (ground): 5404' GL

Well location (give footage from section lines): 1900' FWL, 580' FSL

Section—township—range or block & survey: 35 39N 13W (G&SR)

Field & reservoir (If wildcat, so state): Wildcat

County: Mohave

Distance, in miles, and direction from nearest town or post office: 35 miles south of St. George, Utah

Nearest distance from proposed location to property or lease line: 3300 feet

Distance from proposed location to nearest drilling, completed or applied—for well on the same lease: No other wells feet

Proposed depth: 4000'

Rotary or cable tools: Rotary

Approx. date work will start: May 1, 1960

Number of acres in lease: 2160

Number of wells on lease, including this well, completed in or drilling to this reservoir: No other wells

If lease, purchased with one or more wells drilled, from whom purchased: Name / Address: No other wells

Status of bond: On file

Remarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present producing zone and expected new producing zone)

This Notice of Intention to Drill has a revised surface casing program and supersedes our original Notice of Intention to Drill submitted March 18, 1960.

• Fill in Proposed Casing Program on other side

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the District Production Superintendent the Tennessee Gas Transmission Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

April 20, 1960 (Date)

R. N. Walker (Signature)

Permit Number: _____

Approval Date: _____

Approved By: _____

Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

See Instruction on Reverse Side of Form

STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION

Application to Drill, Deepen or Plug Back

Form No. P-1 File two copies

Authorized by Order No. 4-8-59

Effective April 6, 1959

INSTRUCTIONS

READ CAREFULLY AND COMPLY FULLY

For the purpose of this determination attach hereto a neat, accurate plat, map or sketch of this lease, section, block or lot locating thereon the proposed site for this location. Plat shall be drawn to a scale which will permit the facile observation of all pertinent data. Show distances of the proposed well from the two nearest lease and section lines, and from the nearest wells on the same lease completed in or drilling to the same reservoir. If the location requested is not in conformance with the applicable well-spacing rules, show all off-setting wells to the proposed well, and the names and addresses of all adjoining lease or property owners.

In event plat is filed for the purpose of designating the drilling and producing unit, or proration unit, on which the proposed well is to be drilled, the boundaries of such unit shall be shown, also the boundaries of all other such units attributed to other wells on the same lease completed in or drilling to the same reservoir. The acreage contained within each unit shall also be shown.

Do not confuse survey lines with lease lines. The sketch or plat should show your entire lease if possible. If it is not practical to show the entire lease and the plat shows only a section, block or lot out of your lease, you should clearly show that same is only a part of the lease.

Designate scale to which plat or sketch is drawn. Also designate northerly direction on the sketch or plat.

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
13 3/8"	48	H-40	0	100	100	100
4 1/2"	9.5	J-55	0	4000	4000	250

Form No. P-1

RECEIVED
APR 21 1960
STATE O & G
CONS. COMM.

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATION TO DRILL ☒ DEEPEN ☐ PLUG BACK ☐

NAME OF COMPANY OR OPERATOR — DATE

Tennessee Gas Transmission Company — Durango — Colorado
Address — City — State

P. O. Box 1714

DESCRIPTION OF WELL AND LEASE

Name of lease	Well number	Elevation (ground)
USA Art J. Schreiber	1	5404' GL

Well location (give footage from section lines): 1900' FWL, 580' FSL
Section—township—range or block & survey: 35 39N, 13W (G&SR Meridian)

Field & reservoir (If wildcat, so state): Wildcat
County: Mohave

Distance, in miles, and direction from nearest town or post office: Approximately 35 miles south of St. George, Utah

Nearest distance from proposed location to property or lease line: 3300 feet
Distance from proposed location to nearest drilling, completed or applied—for well on the same lease: No other wells feet

Proposed depth:	Rotary or cable tools	Approx. date work will start
4000'	Rotary	April 1, 1960

Number of acres in lease: 2160
Number of wells on lease, including this well, completed in or drilling to this reservoir: No other wells

If lease, purchased with one or more wells drilled, from whom purchased: Name — Address: No other wells

Status of bond: On file

Remarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present producing zone and expected new producing zone)

• Fill in Proposed Casing Program on other side

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the District Production Supt. of the Tennessee Gas Transmission Co. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

March 18, 1960
Date

R.N.Walker
Signature — R. N. Walker

Permit Number: #114
Approval Date: March 25, 1960
Approved By: M Hurlbut

Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

See Instruction on Reverse Side of Form

STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION

Application to Drill, Deepen or Plug Back

Form No. P-1 — File two copies

Authorized by Order No. 4-6-59

Effective April 6, 19 59

INSTRUCTIONS

READ CAREFULLY AND COMPLY FULLY

For the purpose of this determination attach hereto a neat, accurate plat, map or sketch of this lease, section, block or lot locating thereon the proposed site for this location. Plat shall be drawn to a scale which will permit the facile observation of all pertinent data. Show distances of the proposed well from the two nearest lease and section lines, and from the nearest wells on the same lease completed in or drilling to the same reservoir. If the location requested is not in conformance with the applicable well-spacing rules, show all off-setting wells to the proposed well, and the names and addresses of all adjoining lease or property owners.

In event plat is filed for the purpose of designating the drilling and producing unit, or proration unit, on which the proposed well is to be drilled, the boundaries of such unit shall be shown, also the boundaries of all other such units attributed to other wells on the same lease completed in or drilling to the same reservoir. The acreage contained within each unit shall also be shown.

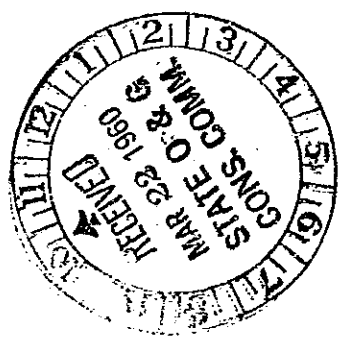
Do not confuse survey lines with lease lines. The sketch or plat should show your entire lease if possible. If it is not practical to show the entire lease and the plat shows only a section, block or lot out of your lease, you should clearly show that same is only a part of the lease.

Designate scale to which plat or sketch is drawn. Also designate northerly direction on the sketch or plat.

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
10 3/4"OD	32.75#/ft.	H-40	0'	850'	850'	550
4 1/2"OD	9.5#/ft.	J-55	0'	4000'	4000'	250

Form No. P-1



COMPANY TENNESSEE GAS ~~& OIL~~ Transmission COMPANY

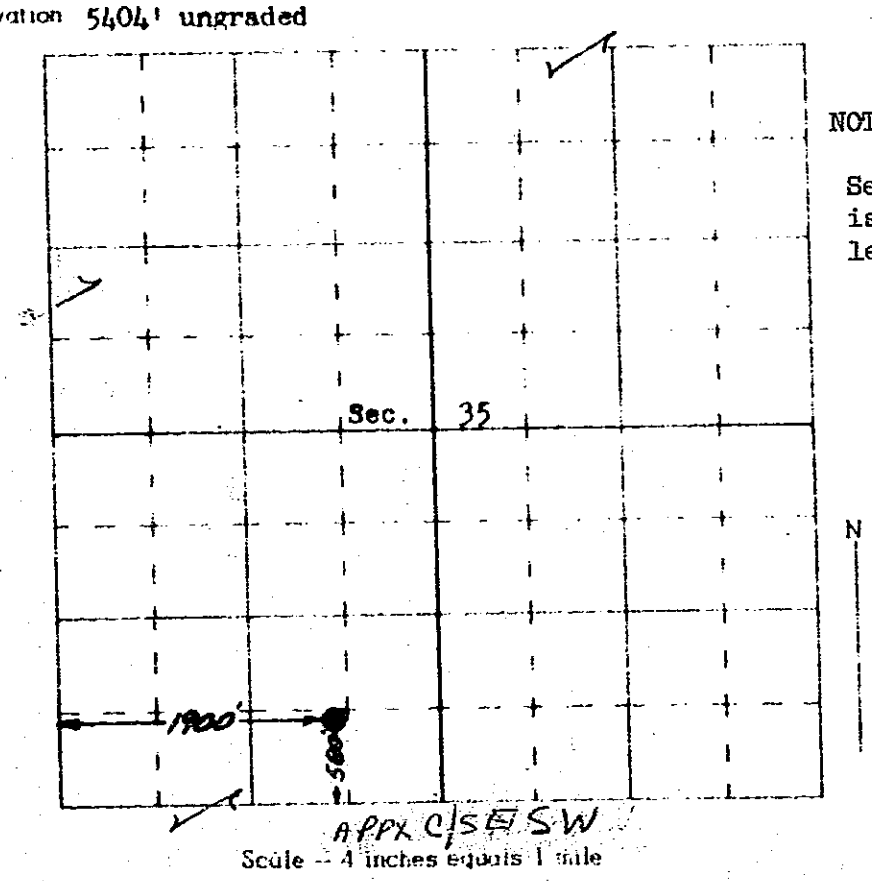
Well Name & No. USA ART J. SCHREIVER B #1 Lease No.

Location 580' FROM THE SOUTH LINE & 1900' FROM THE WEST LINE

Being in SE SW

Sec. 35, T 39 N., R 13 W., G & SRM, MOHAVE COUNTY, ARIZONA

Ground Elevation 5404' ungraded



Scale -- 4 inches equals 1 mile

NOTE:

Section 35, T39N, R13W is only a part of total lease.

Surveyed 14 March, 19 60

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

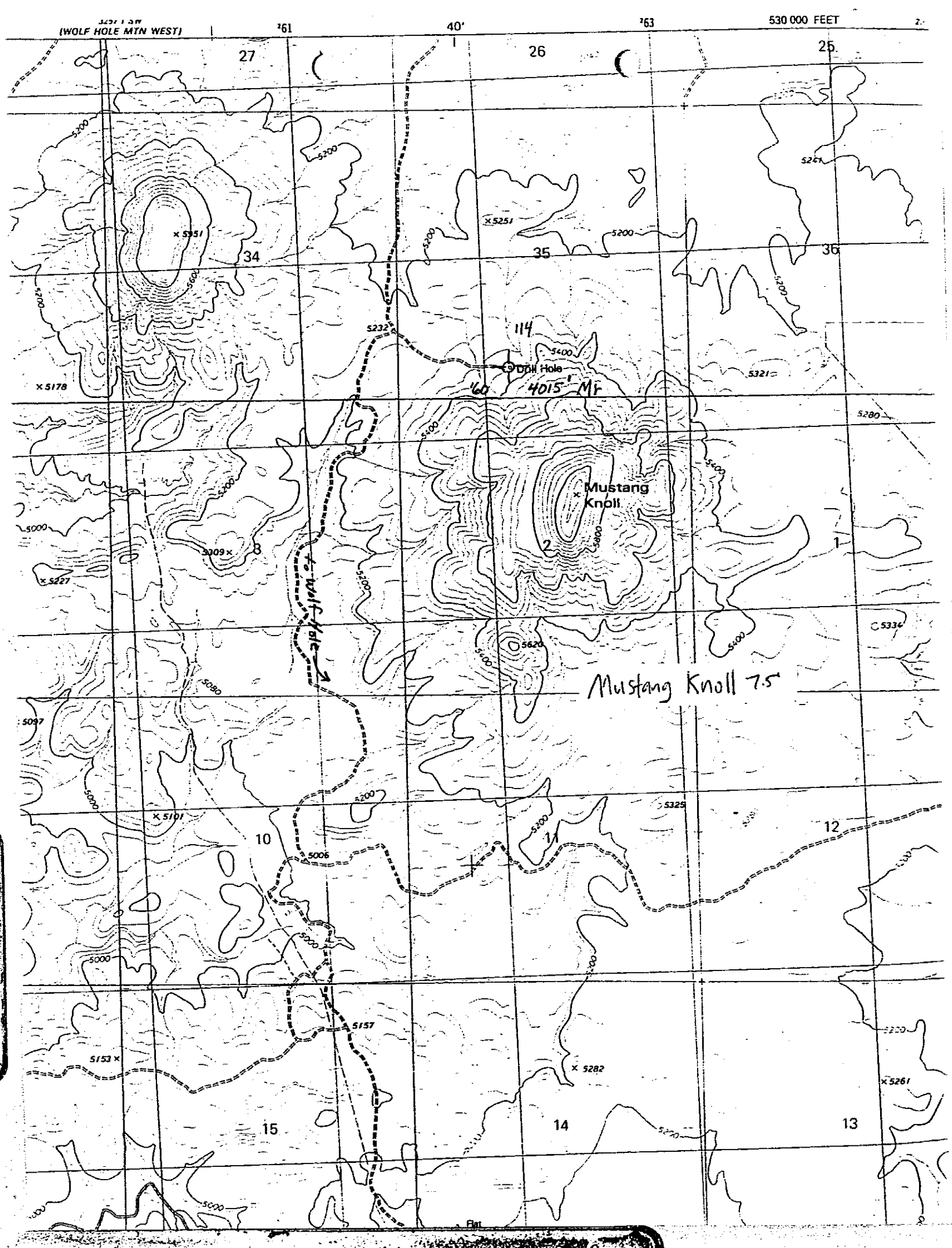
Registered Professional
Engineer and Land Surveyor.
Robert H. Ernst
New Mex. Reg. No. 2463

Seal:

Farmington, New Mexico

114

(WOLF HOLE MTN WEST)



Mustang Knoll 7.5

BLANKET
BOND

KNOW ALL MEN BY THESE PRESENTS,

That we: TENNESSEE GAS TRANSMISSION COMPANY, a Delaware corporation

of the County of: Harris in the State of: Texas

as Principal,
and NATIONAL SURETY CORPORATION

of New York, New York
authorized to do business within the State of Arizona,

as surety, are held and firmly bound unto the State of Arizona in the penal sum as indicated, lawful money of the United States, for which payment, well and truly to be made, we bind ourselves, and each of us, and each of our heirs, executors, administrators or successors, and assigns jointly and severally, firmly by these presents.

The condition of this obligation is that whereas the above bounden principal proposes to drill a well or wells for oil, gas or stratigraphic purposes in and upon the ~~following described~~ lands situated within the State, ~~to wit~~ and

WHEREAS, said Principal desires to give a blanket bond in lieu of individual bonds to
(May be used as blanket bond or for single well)
cover any and all wells drilled or to be drilled by Principal within the State of
Arizona

CANCELLED

DATE 3-7-62

NOW, THEREFORE, if the above bounden principal shall comply with all of the provisions of the laws of this State and the rules, regulations and orders of the Oil & Gas Conservation Commission, especially with reference to the requirements of A. R. S. 27-516, providing for the proper drilling, casing and plugging of said well or wells, and filing with the Oil & Gas Conservation Commission all notices and records required by said Commission, in the event said well or wells do not produce oil or gas in commercial quantities, or cease to produce oil or gas in commercial quantities, then this obligation is void; otherwise, the same shall be and remain in full force and effect.

Penal sum of Ten Thousand and no/100-------($10,000.00) Dollars

Witness our hands and seals, this 10 day of March, A. D. 1960

ATTEST: [signature]
Assistant Secretary

TENNESSEE GAS TRANSMISSION COMPANY

By: [signature]
Vice President of Tennessee Gas and Oil Company, a division of Tennessee Gas Transmission Company
Principal

Witness our hands and seals, this 10th day of March, 1960

Countersigned at Phoenix, Ariz
March 18, 1960
John B. Phelan

NATIONAL SURETY CORPORATION

BY [signature]
N. Carothers - Atty-in-fact
Surety

(If the principal is a corporation, the bond should be executed by its duly authorized officers, with the seal of the corporation affixed. When principal or surety executes this bond by agent, power of attorney or other evidence of authority must accompany the bond.)

Approved _____
Date

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION

P-2

11c/

NATIONAL SURETY CORPORATION

New York

A Member of The FUND Insurance Companies

GENERAL POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that NATIONAL SURETY CORPORATION, a Corporation duly organized and existing under the laws of the State of New York, and having its principal office in the City of New York, N. Y., hath made, constituted and appointed, and does by these presents make, constitute and appoint N. CAROTHERS

of HOUSTON and State of TEXAS

its true and lawful Attorney(s)-in-Fact, with full power and authority hereby conferred in its name, place and stead, to execute, acknowledge and deliver Any and all bonds, recognizances, contracts, agreements of indemnity and other conditional or obligatory undertakings; provided, however, that the penal sum of any one such instrument executed hereunder shall not exceed FIVE HUNDRED THOUSAND ($500,000.00)DOLLARS- - - -

and to bind the Corporation thereby as fully and to the same extent as if such bonds were signed by the President, sealed with the corporate seal of the Corporation and duly attested by its Secretary, hereby ratifying and confirming all that the said Attorney(s)-in-Fact may do in the premises. Said appointment is made under and by authority of the following provisions of the By-laws of NATIONAL SURETY CORPORATION:

"ARTICLE XII. RESIDENT OFFICERS AND ATTORNEYS-IN-FACT.

"Section 1.—The Chairman, President or any Vice-President may from time to time appoint Resident Vice-Presidents, Resident Assistant Secretaries and Attorneys-in-Fact to represent and act for and on behalf of the corporation and the Chairman, President, or any Vice-President, the Board of Directors or the Executive Committee may at any time suspend or revoke the powers and authority given to any such Resident Vice-President, Resident Assistant Secretary and Attorney-in-Fact, and also remove them from office. (Adopted April 29, 1933. Applies to all powers of attorney executed prior to May 25, 1933).

"Section 1.—The President, Executive Vice-President or any Vice-President may, from time to time, appoint Resident Vice-Presidents, Resident Assistant Secretaries and Attorneys-in-Fact to represent and act for and on behalf of the Corporation and the President, Executive Vice-President or any Vice-President, the Board of Directors or the Executive and Finance Committee may at any time suspend or revoke the powers and authority given to any such Resident Vice-President, Resident Assistant Secretary or Attorney-in-Fact, and also remove any of them from office. (As amended May 25, 1933. Applies to all powers of attorney executed prior to April 27, 1943).

"Section 1.—Appointment.—The President, Executive Vice President or any Vice President may, from time to time, appoint Resident Vice Presidents, Resident Assistant Secretaries and Attorneys-in-Fact to represent and act for and on behalf of the Corporation. (As amended April 27, 1943. Applies to all powers of attorney executed on or after that date).

"Section 4.—Attorneys-in-Fact.—Attorneys-in-Fact may be given full power and authority to execute, acknowledge and deliver for and in the name and on behalf of the Corporation any and all bonds, recognizances, contracts of indemnity and other conditional or obligatory undertakings, and any such instrument executed by any such Attorney-in-Fact shall be as binding upon the Corporation as if signed by the Chairman or the President and sealed and attested by the Secretary. (Adopted April 29, 1933. Applies to all powers of attorney executed prior to May 25, 1933).

"Section 4.—Attorneys-in-Fact.—Attorneys-in-Fact may be given full power and authority to execute, acknowledge and deliver for and in the name and on behalf of the Corporation any and all bonds, recognizances, contracts of indemnity and other conditional or obligatory undertakings, and any such instrument so executed by any such Attorney-in-Fact shall be as binding upon the Corporation as if signed by the President and sealed and attested by the Secretary. (As amended May 25, 1933. Applies to all powers of attorney executed prior to July 30, 1935).

"Section 4.—Attorneys-in-Fact.—Attorneys-in-Fact may be given full power and authority, for and in the name and on behalf of the corporation, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts of indemnity and other conditional or obligatory undertakings, and any and all notices and documents cancelling or terminating the corporation's liability thereunder, and any such instrument so executed by any such Attorney-in-Fact shall be as binding upon the corporation as if signed by the President and sealed and attested by the Secretary. (As amended July 30, 1935. Applies to all powers of attorney executed prior to April 27, 1943).

"Section 4.—Attorneys-in-Fact.—Attorneys-in-Fact may be given full power and authority, for and in the name and on behalf of the Corporation, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements of indemnity and other conditional or obligatory undertakings, and any and all notices and documents cancelling or terminating the Corporation's liability thereunder, and any such instrument so executed by any such Attorney-in-Fact shall be as binding upon the Corporation as if signed by the President and sealed and attested by the Secretary. (As amended April 27, 1943. Applies to all powers of attorney executed prior to April 28, 1953.)

"Section 4.—Attorneys-in-Fact.—Attorneys-in-Fact may be given full power and authority, for and in the name and on behalf of the Corporation, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements of indemnity and other conditional or obligatory undertakings, and any and all consents and releases incident thereto, and any and all notices and documents cancelling or terminating the Corporation's liability thereunder, and any such instrument so executed by such Attorney-in-Fact shall be as binding upon the Corporation as if signed by the President and sealed and attested by the Secretary. (As amended April 28, 1953. Applies to all powers of attorney executed on or after that date.)

"Section 7.—Attorneys-in-Fact.—Attorneys-in-Fact are hereby authorized to verify any affidavit required to be attached to bonds, recognizances, contracts of indemnity, or other conditional or obligatory undertakings, and they are also authorized and empowered to certify to a copy of the By-laws of the Corporation or any Article or Section thereof. (Adopted April 29, 1933. Applies to all powers of attorney executed prior to May 25, 1933).

"Section 7.—Attorneys-in-Fact.—Attorneys-in-Fact are hereby authorized to verify any affidavit required to be attached to bonds, recognizances, contracts of indemnity, or other conditional or obligatory undertakings, and they are also authorized and empowered to certify to copies of the By-laws of the corporation or any Article or Section thereof. (As amended May 25, 1933. Applies to all powers of attorney executed prior to April 27, 1943).

"Section 7.—Attorneys-in-Fact—Verifications.—Attorneys-in-Fact are hereby authorized to verify any affidavit required to be attached to bonds, recognizances, contracts, agreements of indemnity, or other conditional or obligatory undertakings, and they are also authorized and empowered to certify to copies of the By-laws of the Corporation or any Article or Section thereof. (As amended April 27, 1943. Applies to all powers of attorney executed prior to June 27, 1944).

"Section 7.—Attorneys-in-Fact—Verifications—Certifications.—Attorneys-in-Fact are hereby authorized to verify, by affidavit or otherwise, the authority to execute bonds, recognizances, contracts, agreements of indemnity, and other conditional or obligatory undertakings; and to certify, by affidavit or otherwise, as to the inspection or examination of assets of the estates, where the fiduciary responsible for such assets is bonded by the Corporation; and they are also authorized and empowered to certify to copies of the By-laws of the Corporation or any Article or Section thereof. (As amended June 27, 1944. Applies to all powers of attorney executed on or after that date).

"ARTICLE VIII. APPOINTMENT AND AUTHORITY OF RESIDENT ASSISTANT SECRETARIES, AND ATTORNEYS-IN-FACT, AND AGENTS TO ACCEPT LEGAL PROCESS AND MAKE APPEARANCES.

Section 30. Appointment. The President, any Vice President, or any other person authorized by the Board of Directors, the Chairman of the Board of Directors, the President or any Vice President, may, from time to time, appoint Resident Assistant Secretaries and Attorneys-in-Fact to represent and act for and on behalf of the Corporation and Agents to accept legal process and make appearances for and on behalf of the Corporation. (Adopted October 25, 1955. Applies to all Powers of Attorney executed on and after that date.)

Section 31. Authority. The authority of such Resident Assistant Secretaries, Attorneys-in-Fact, and Agents shall be as prescribed in the instrument evidencing their appointment, and any such appointment and all authority granted thereby may be revoked at any time by the Board of Directors or by any person empowered to make such appointment. (Adopted October 25, 1955. Applies to all Powers of Attorney executed on and after that date.)

IN WITNESS WHEREOF, NATIONAL SURETY CORPORATION has caused these presents to be signed by its Vice President, attested by its Assistant Secretary, and its corporate seal to be hereto affixed this 10th day of June A.D., 19 55

NATIONAL SURETY CORPORATION

(Seal)

By S. G. DRAKE
Vice President

ATTEST: A. N. MacDOUGALL
Assistant Secretary

F. 2011 REV. 1/56

CANCELLED
DATE 3-2-62

114

STATE OF NEW YORK,
COUNTY OF NEW YORK, } ss.:

On this 10th day of June A.D., 19 55

before me personally came S. G. DRAKE, to me known, who, being by me duly sworn, did depose and say, that he resides in the City of New York; that he is Vice President of NATIONAL SURETY CORPORATION, the Corporation described in and which executed the above instrument; that he knows the seal of said Corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said Corporation and that he signed his name thereto by like order. And said S. G. DRAKE further said that he is acquainted with A. N. MacDOUGALL and knows him to be an Assistant Secretary of said Corporation; and that he executed the above instrument.

ELIZABETH C. KING
Notary Public

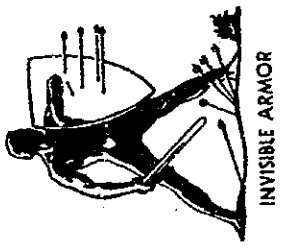
(Notarial seal affixed)

STATE OF TEXAS
COUNTY OF DALLAS } ss.:

I, W. P. HAYNES, Resident Assistant Secretary and Attorney-in-Fact of NATIONAL SURETY CORPORATION, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney (including applicable By-law sections), executed by said NATIONAL SURETY CORPORATION, which is still in force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation, at the City of Dallas, Texas this 10th day March A.D., 19 60.

W P Haynes
Resident Assistant Secretary and Attorney-in-Fact



NATIONAL SURETY CORPORATION
New York

A Member of The FUND Insurance Companies

GENERAL
POWER OF ATTORNEY

—TO—

ON

DATE 19

P. 2014

March 7, 1962

Mr. Robert T. McCarthy, Assistant Manager
Fire and Casualty Department
Tenneco Oil Company
P. O. Box 18
Houston, Texas

Re: Permit Bond No. 5049680 - $10,000 Blanket
Drilling Bond to the State of Arizona

Dear Mr. McCarthy:

We owe you an apology. Your letter of February 26, 1962 was misplacedand our answer delayed.

You have our authorization to cancel your above designated bond.

Our wish for your company is success. We appreciate your cooperation and sincerely hope your exploration efforts will return you to Arizona soon.

Yours very truly,

D. A. Jerome
Executive Secretary

TENNECO

TENNECO OIL COMPANY · P. O. BOX 18 · TENNESSEE BUILDING · CAPITOL 3-4841 · HOUSTON, TEXAS

February 26, 1962

Oil and Gas Conservation Commission
State of Arizona
3500 North Central Suite 312
Phoenix, Arizona

Re: Permit Bond No. 5049680 - $10,000 Blanket
Drilling Bond to the State of Arizona

Dear Mr. Gerome:

Please be advised that we wish to cancel the above captioned bond as of March 10, 1962, as we are no longer doing any drilling in the state of Arizona.

May we please have your authorization to cancel this bond.

Very truly yours,

Robert T. McCarthy
Assistant Manager
Fire & Casualty Department

RTM:JDB:bli

114

TENNESSEE GAS TRANSMISSION COMPANY
P. O. BOX 1714
DURANGO, COLORADO

PLEASE ADDRESS YOUR
REPLY TO ATTENTION OF:

R. N. Walker

June 15, 1960

State of Arizona Oil and Gas
Conservation Commission
3500 North Central - Suite 312
Phoenix, Arizona

Gentlemen:

Subject: Tennessee Gas Transmission Company
USA Art J. Schreiber Well No. 1
Section 35, T39N, R13W, Mohave County,
Arizona

Enclosed are three copies each of the Gamma Ray and

Induction Logs on the subject well.

Yours very truly,

TENNESSEE GAS TRANSMISSION COMPANY

J. J. Lacey
District Petroleum Engineer

JHW:ljr

Enclosures

114

June 6, 1960

COPY

Mr. Paul Messinger
Exploration Manager
Davis Oil Company
1020 Midland Savings Building
Denver 2, Colorado

Dear Mr. Messinger:

We have this date received the copies of Induction Log and Gamma Ray Log and the Geological Report on this well.

We have been in contact with Tennessee Gas and it is their desire this information be kept tight for 60 days, or until June 27th.

We thank you very much for the information and sincerely hope you will continue to consider our State in your exploration program.

Yours very truly,

W. F. Maule
Petro. Engr.

WFM:mb

114

DAVIS OIL COMPANY

OIL PRODUCERS

1020 MIDLAND SAVINGS BLDG. • DENVER 2, COLORADO • Alpine 5-4661

NEW YORK, NEW YORK
DENVER, COLORADO
SALT LAKE CITY, UTAH
CASPER, WYOMING
ALBUQUERQUE, NEW MEXICO

June 3, 1960

RE: USA Art J. Schreiber No. 1
SE SW, Section 35-39N-13W
Mojave County, Arizona

Arizona Oil and Gas Conservation Commission
3500 North Central
Phoenix, Arizona

Gentlemen:

Enclosed herewith please find two (2) copies each of Induction Log and Gamma Ray Log on the Davis Oil Company U.S.A. Art J. Schreiber No. 1 Well.

We have also enclosed one (1) copy of the Geological Report on this well. The well has been drilled as a "tight hole", therefore we would appreciate it very much if you would not release any information relative to it.

Thank you very much for your cooperation in this matter, and if you have any further questions, please do not hesitate to contact our office.

Very truly yours,

DAVIS OIL COMPANY

Paul Messinger
Exploration Manager

PM/vf
Enclosures

1/4

June 1, 1960

COPY

Mr. R. N. Walker
Tennessee Gas Transmission Company
P. O. Box 1714
Durango, Colorado

Dear Mr. Walker:

We return for your files approved copies of Forms P-15, P-15a, and P-7, relative to plugging the Schreiber #1, Mohave County, Arizona, We will release your bond on subject well as soon as I can inspect the location. We wish to advise you that the information we have on your well will be held confidential until 27 July 1960, at which time we request that you furnish this office with logs, samples and/or other geological information which you have available.

We sincerely hope your company continues to explore for oil and gas in our State.

Sincerely yours,

W. F. Maule
Petroleum Engineer

WFM/ew
Enclosures

114

TENNESSEE GAS TRANSMISSION COMPANY
P. O. BOX 1714
DURANGO, COLORADO

PLEASE ADDRESS YOUR
REPLY TO ATTENTION OF:
R. N. Walker

May 27, 1960

State of Arizona Oil and Gas
Conservation Commission
3500 North Central - Suite 312
Phoenix, Arizona

Gentlemen:

Subject: Tennessee Gas Transmission Company
USA Art J. Schreiber Well No. 1
Section 35, T39N, R13W, Mohave County,
Arizona

Attached are the original and two copies of the following documents pertaining to the subject well.

1. Plugging Record
2. Well Completion Report and Well Log
3. Application to Abandon and Plug

We request that all geological data contained on these reports be held confidential for a period of 60 days.

Yours very truly,

TENNESSEE GAS TRANSMISSION COMPANY

R.N.Walker

R. N. Walker
District Production Superintendent

WEC/ah

Attachments

114

May 25, 1960

Tennessee Gas Transmission Company
Box 1714
Durango, Colorado

Attention: Production Department

Gentlemen:

In reference to my telephone conversation with J. J. Nance, I am enclosing the necessary forms to report completion of your Schriber #1 Well, Mohave County, Arizona. Please sign these in triplicate.

Such logs, maps or other geological data that you file with this office may be held confidential for a period of six months. We ask that you set a release date on this information.

We sincerely hope that you will continue to consider our State for future exploratory work.

Sincerely,

W. F. Maule
Petroleum Engineer

WFM/ev
Enclosures

COPY

114

TENNESSEE GAS TRANSMISSION COMPANY
P. O. BOX 1714
DURANGO, COLORADO

PLEASE ADDRESS YOUR
REPLY TO ATTENTION OF:
R. N. Walker

April 20, 1960

State of Arizona
Oil & Gas Conservation Commission
3500 N. Central, Suite 312
Phoenix, Arizona

Gentlemen:

Subject: Tennessee Gas Transmission Company
USA Art J. Schreiber Well #1, 1900' FWL, 580' FWL, Section 35, T39N, R13W, G&SR Meridian, Mohave County

Attached are the original and two copies of Application for Permit to Drill subject well. This application supersedes application submitted March 18, 1960.

Yours very truly,

TENNESSEE GAS TRANSMISSION COMPANY

R.N.Walker

R. N. Walker
District Production Superintendent

WEC/ah

Attachments

RECEIVED
APR 21 1960
STATE O & G
CONS. COMM.

114

March 22, 1960

Tennessee Gas Transmission Co.
P.O. Box 1714
Durango, Colorado

RE: Schreiber Well # 1 Mohave County
Sec. 35 T.39N., R.13W.
Application for Permit to Drill
Deepen or Plug Back.

Gentlemen:

Enclosed herewith, is your receipt for Drilling Permit No. 114, in the amount of $25.00, dated March 22, 1960, and your approved copy of the Application for Permit to Drill, Deepen or Plug Back.

Please submit ALL FORMS to this office in triplicate.

Yours very truly,

W. F. Maule,
Petroleum Engineer

WFM:gg
Encl:

114

TENNESSEE GAS TRANSMISSION COMPANY
P. O. BOX 1714
DURANGO, COLORADO

March 18, 1960

#114
3/22/60

PLEASE ADDRESS YOUR
REPLY TO ATTENTION OF:

R. N. Walker

State of Arizona
Oil & Gas Conservation Commission
3500 N. Central, Suite 312
Phoenix, Arizona

Gentlemen:

Subject: Tennessee Gas Transmission co.
USA Art J. Schreiber Well #1,
1900' FWL, 580' FSL, Section 35,
T39N, R13W, G&SR Meridian,
Mohave County

Attached are the original and one copy of Application for permit to Drill subject well. Attached to each copy of the Application is a location plat.

Also attached is a check in the amount of $25.00 for a Permit to Drill and a Tennessee Gas Transmission Company Petty Cash Voucher. Please sign this voucher indicating that you have received payment and return it with the Permit.

If you have any questions concerning this Application or if you ever have any questions or comments concerning our operations in the State of Arizona please feel free to contact us at the above address or call us collect at CHerry 7-5494, Durango, Colorado.

Yours very truly,
TENNESSEE GAS TRANSMISSION COMPANY

Wayne E. Cox

Wayne E. Cox
District Office Supervisor

RECEIVED
MAR 22 1960
STATE O & G
CONS. COMM.

WEC/ah

Attachments

114

The FUND
Insurance Companies

FIREMAN'S FUND INSURANCE COMPANY • HOME FIRE & MARINE INSURANCE COMPANY • NATIONAL SURETY CORPORATION

Phoenix Office

9 LUHRS BUILDING ARCADE • PHOENIX, ARIZONA • Alpine 8-4585

March 18, 1960

Oil and Gas Conservation Commission
State of Arizona
3500 North Central Avenue
Phoenix, Arizona

Re: Tennessee Gas Transmission Company
Bond No. 5049680

Gentlemen:

We are attaching the captioned Blanket Bond, which has been property executed and countersigned for the State of Arizona.

Kindly file in the usual manner.

Thank you.

Very truly yours,

JOHN B. PHELAN
State Agent

JBP:wb
Encl.

CC: Houston Office

RECEIVED
MAR 19 1960
STATE O & G
CONS. COMM.

114

TENNESSEE GAS AND OIL COMPANY
DIVISION OF TENNESSEE GAS TRANSMISSION COMPANY
P. O. BOX 2511 · TENNESSEE BUILDING · CAPITOL 3-4841 · **HOUSTON, TEXAS**

March 11, 1960

Mrs. N. Carothers
The Fund Insurance Companies
3400 Montrose Boulevard
Houston, Texas

Re: Blanket Drilling Bond Arizona

Dear Mrs. Carothers:

Attached is a Blanket Drilling Bond for The State of Arizona which has been properly executed by Tennessee Gas Transmission Company. Please execute the bond for National Surety, have it countersigned by an Arizona resident agent, and then filed with:

Oil and Gas Conservation Commission
State of Arizona
3500 North Central Suite 312
Phoenix, Arizona
Attention: Mr. D. A. Gerome

Please furnish this office with copies of all letters of transmittal and use Julius Levi and Company as agents.

Very truly yours,

Jerry Peake
Assistant Manager
Fire & Casualty Department

JP:kcp
Attachment
cc: Mr. John Hudson
Mr. D. A. Gerome

TENNESSEE GAS TRANSMISSION COMPANY

P. O. BOX 2511 · TENNESSEE BUILDING · CAPITOL 3-4841 · **HOUSTON, TEXAS**

March 11, 1960

Oil and Gas Conservation Commission
State of Arizona
3500 N. Central - Suite 312
Phoenix, Arizona

Attention: Mr. D. A. Jerome,
Executive Secretary

Re: Blanket Drilling Bond

Gentlemen:

Pursuant to instructions in your letter of March 8, 1960 we are enclosing herewith Organization Report properly completed and executed by M. H. Covey, Assistant Secretary of this company.

A Blanket Bond with the company, as Principal, and National Surety Corporation, as Surety, has been completed and forwarded to the Surety's Phoenix office for countersignature with instructions to deliver the original to you as soon as same has been completed. This Bond was executed on behalf of the company by J. Spencer Collins, Vice President of Tennessee Gas and Oil Company, a division of Tennessee Gas Transmission Company and A. Alverson, as Assistant Secretary of Tennessee Gas Transmission Company. We are enclosing a certified copy of certain Resolutions adopted by this company on October 30, 1958, as well as a certificate of Incumbency authorizing Mr. Collins and Miss Alverson to execute instruments on behalf of this company.

The Application for Permit to Drill, together with the $25.00 fee for same, will be forwarded to you by our Denver office.

Yours very truly,

TENNESSEE GAS TRANSMISSION COMPANY

By John R. Friedman
Records and Rental Section

JRH:jm

Encls.

cc: Mr. J. D. Moon

1141